REMARKS

Claims 1-16 are rejected. Claims 1-16 are presently pending in the application. Favorable reconsideration of the application in view of the following remarks is respectfully requested.

Rejection Of Claims 1-16 Under 35 U.S.C. §103(a):

The Examiner has rejected Claims 1-16 under 35 U.S.C. 103(a) as being unpatentable over Bourdelais et al (6,022,677) in view of Foy et al (4,331,786) or Ueda et al (5,604,284), as Bourdelais et al disclose an imaging element comprising a layer of biaxially oriented sheet adhered to the bottom surface of a base wherein said biaxially oriented sheet adhered to the bottom surface has a surface roughness average of between about 0.30 to 2.00 microns, any suitable biaxially oriented polyolefin sheet may be used for the sheet on the topside of the laminated base of the invention, microvoided composite biaxially oriented sheets are preferred and are conveniently manufactured by coextrusion of the core and surface layers, followed by biaxial orientation, whereby voids are formed around void-initiating material contained in the core layer, the composite sheet, while described as having preferably at least three layers of a microvoided core and a skin layer on each side, may also be provided with additional layers that may serve to change the properties of the biaxially oriented sheet, a different effect may be achieved by additional layers, such layers might contain tints, antistatic materials, or different void-making materials to produce sheets of unique properties, biaxially oriented sheets could be formed with surface layers that would provide an improved adhesion, or look to the support and photographic element, and the biaxially oriented extrusion could be carried out with as many as 10 layers if desired to achieve some particular desired property. The Examiner states that, while the reference teaches that antistatic materials may be added to the extruded polymer sheets, the reference is silent with respect to specific materials. The Examiner notes, however, that Foy et al disclose a moldable and/or extrudable polyether-ester-amide block copolymers having recurrent units wherein A is a polyamide sequence and B is a polyoxyalkylene sequence and a method for preparing same by condensation of a dicarboxylic polyamide with a polyoxyalkylene glycol, the particular object of the invention of Foy is to provide such polyether-ester-amide block copolymers which are elastomers and are transformable into articles consisting essentially of these copolymers, and the

proportion by weight of the polyoxyalkylene glycol with respect to the total weight of the polyether-ester-amide block copolymer can vary from about 5% to about 90%, suitably from about 5% to about 85%. The Examiner indicates that, given the teachings o f the reference, it would have been obvious to one of ordinary skill in the art to prepare the material of Bourdelais et al choosing to employ the antistat material taught by Foy et al to increase mechanical properties, with reasonable expectation of achieving a film having improved strength properties and curl control. The Examiner continues, indicating that Ueda et al disclose a polyetheresteramide having good heat resistance, permanent antistatic property and supex for compatibility with thermoplastic resins and a resin composition containing the polyetherésteramide are disclosed, wherein the polyetherester-amide consists essentially of a polyamide a oligomer with carboxylic chain ends having a number average molecular weight between 200 and 5,000 and a bisphenol compound with oxyalkylene units having a number average molecular weight between 300 and 3,000, antistatic resin compositions with good antistatic property and heat resistance are obtained from compositions comprising 3 to 40% by weight of the polyetheresteramide and 60 to 97% by weight of thermoplastic resins, the antistatic resin compositions can contain as compatibilizers vinyl polymers having functional groups such as carboxyl and epoxy groups or block polymers containing polyolefin blocks and aromatic vinyl polymer blocks, to further improve the antistatic property of the resin composition a composition comprising at least 97% by weight of the polyetheresteramide and at least 0.01 % by weight of an alkali metal or alkaline earth metal halide can be used in the same way as the polyetheresteramides, and therefore, given the teachings of the reference, it would have been obvious to one of ordinary skill in the art to prepare the material of Bourdelais et al choosing to employ the antistat material taught by Ueda et al to increase heat resistance, with reasonable expectation of achieving a film having improved strength properties and curl control.

Bourdelais (US 6,022,677) teaches an imaging element comprising a biaxially oriented sheet having a surface roughness between 0.3 and 2.0 μm adhered to the bottom surface of a base, wherein the roughness is obtained by including particles, incompatible copolymers, or embossing. Bourdelais fails to teach compatibilizing polymers to achieve surface roughness, fails to teach the use of polyether polymeric antistats combined with extrudable polymer and

compatibilizer (col. 9, lines 38-40, col. 9, lines 51-50, col. 10, lines 15-23), and fails to teach a single layer, which provides both roughness and antistatic properties.

Foy discloses a moldable and/or extrudable polyether-ester-amide block copolymer which has mechanical properties allowing these plastic materials to be used in technological transformation operations for the manufacture of molded or extruded articles such as films, sheaths, fibers for textile products, tubes, pipes, etc. Foy fails to disclose information relating to roughness, providing a sheet material which has a surface layer which is both antistatic and roughened, fails to mention the use of compatibilizers, and fails to mention stretching a sheet to provide the desired roughness characteristics.

Ueda discloses a polyetheresteramide having good heat resistance, permanent antistatic properties and superior compatibility with thermoplastic resins and a resin composition containing the polyetheresteramides which may contain as compatibilizers vinyl polymers having functional groups such as carboxyl and epoxy groups or block polymers containing polyolefin blocks and aromatic vinyl polymer blocks. Ueda fails to disclose information relating to roughness, providing a sheet material which has a surface layer which is both antistatic and roughened, and fails to mention stretching a sheet to provide the desired roughness characteristics.

The present invention claims a method of forming a roughened sheet comprising extruding a polymer sheet wherein at least one surface layer comprises polyether polymeric antistat, extrudable polymer, and compatibilizer, stretching said polymer sheet by a ratio of at least 3:1 in at least one direction such that said at least one surface layer has a roughness of greater 0.3 Ra.

To establish a case for obviousness under 35 U.S.C. § 103, three criteria must be met. First, there must be some suggestion or motivation to modify the references or combine the teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claim limitations.

The cited references alone, or in combination fail to provide suggestion or motivation to modify or combine the references. Bourdelais teaches a roughened biaxially oriented layer, but fails to teach or suggest the inclusion of antistatic polyether polymer or compatibilizer. Foy teaches an antistatic polymer

layer, but makes no reference to stretching to provide surface roughness, fails to mention the use of compatibilizer, and fails to mention a rough surface layer which is also antistatic. Ueda teaches an antistatic polymer layer, but makes no reference to surface roughness or orienting (stretching) a sheet to produce a rough surface. The present invention, however, claims a methods for making a roughened sheet of polyether polymeric antistat, extrudable polymer, and compatibilizer via stretching the sheet. The attached copy of the Affidavit of Majumdar, the original of which was presented in a related divisional U.S. Patent Application Serial No. 10/170,117, now U.S Pat. No. 6,838,165 of parent application U.S. Patent Application Serial No. 09/853,846, now U.S Pat. No. 6,436,619, indicates that one of ordinary skill in the art would not use a compatibilizer as presently claimed and as described in Ueda, which lessens delamination tendency, improves phase morphology and, typically produces a smoother surface layer (Affidavit of Majumdar, paragraphs 5 - 11), to produce the rough surface described in Bourdelais. The attached copy of the Affidavit of Bourdelais, the original of which was presented in a related divisional U.S. Patent Application Serial No. 10/170,117, now U.S Pat. No. 6,838,165 of parent application U.S. Patent Application Serial No. 09/853,846, now U.S Pat. No. 6,436,619, indicates that the addition of a compatibilizer to the invention of Bourdelais would render it inoperable or change the principle of the invention's operation. See attached Affidavit of Bourdelais, paragraphs 4 and 5. Therefore, no combination of Bourdelais and Ueda produces the method of providing a polymer sheet wherein at least one surface layer comprises polyether polymeric antistat, extrudable polymer, and compatibilizer, and stretching said polymer sheet by a ratio of at least 3:1 in at least one direction such that said at least one surface layer has a roughness of greater 0.3 Ra.

The Examiner states that it would be obvious to one of ordinary skill in the art to prepare the material of Bourdelais et al choosing to employ the antistat material taught by Foy et al to increase mechanical properties, with reasonable expectation of achieving a film having improved strength properties and curl control. However, this suggested combination fails to teach a rough conductive surface layer. First, there is no mention of roughness or stretching in Foy. Foy discloses improved strength properties and curl control, but fails to mention roughness. Bourdelais, while teaching stretching, indicates that the

antistatic layer is separate from the oriented layer. A combination of the two would at best provide a method wherein polyether polymeric antistat and extrudable polymer are combined and applied to a stretched polymer support. The stretched support would have a roughness of greater 0.3 Ra. If Foy alone is combined with Bourdelais, the claimed compatibilizer is also lacking.

If Foy, Ueda and Bourdelais are combined, the combination may at best lead one to produce a rough oriented layer and apply a separate conductive layer. None of the references disclose combining a polyether polymeric antistat, extrudable polymer, and compatibilizer into one layer in a polymer sheet, and stretching the polymer sheet by a ratio of at least 3:1 in at least one direction such that the surface layer has a roughness of greater 0.3 Ra.

The cited references alone, or in combination, fail to provide any reasonable expectation of success for making an extrudable polymer layer containing a compatible polyether polymeric antistat and compatibilizer which is both rough and electrically conductive. The references to Foy, Ueda, and Bourdelais provides no expectation of success. Ueda teaches the optional use of a compatibilizer added in an amount effective to provide a thermoplastic resin composition which exhibits improved compatibility. Compatibility is meant to include the minimization of gross phase separation between the components of the blend, as illustrated by, for example, reduced delamination tendency (Ueda, col. 6, lines 57-67). On the other hand, Bourdelais teaches creating the desired roughness by the use of incompatible block copolymers, which, during the biaxially orientation of the sheet, do not mix and thereby create the desired surface roughness. (see col. 9, lines 51-60) Therefore, since Bourdelais teaches incompatibility to produce surface roughness and Ueda teaches polymeric compatibility, the combination of the references produces no likelihood of success. Foy is silent regarding compatibilizer. Ueda and Foy also fail to provide any likelihood of success in producing a conductive sheet with a rough surface by failing to disclose roughness or stretching to provide roughness.

In addition, the reference to Bourdelais teaches away from the surface layer of the present invention having the specified roughness and conductivity. Bourdelais teaches away from the present invention in col. 10, lines 15-24, by indicating that successful transport is accomplished by an additional and separate antistatic layer coated on top of the roughened biaxial layer.

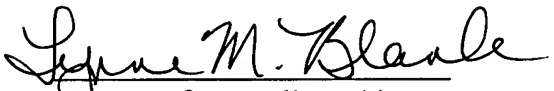
Bourdelais, therefore, not only requires a separate antistatic layer, but also provides that the roughened layer is no longer the surface layer. The desired roughness, to afford effective conveyance, is attained unexpectedly in the antistatic layer of the instant invention, through a combination of polyether containing conductive polymer, extrudable polymer and compatibilizer.

The cited references also fail to teach all the claim limitations of the present invention. Bourdelais teaches roughened biaxially oriented layers, but fails to teach the roughened layer containing antistat of the present invention or the combination of polyether polymeric antistat, extrudable polymer and compatibilizer claimed in the present invention. Ueda and Foy, which teach polymeric antistatic layers, fail to teach the roughness or means of achieving the roughness claimed in the present invention by combination of polyether polymeric antistat, extrudable polymer and compatibilizer.

In summary, the Applicants believe that, since the cited references provides no motivation to modify, no reasonable expectation of success, and fail to suggest all the claims limitation of the present invention, the § 35 U.S.C. § 103 rejection of the present invention in view of Bourdelais in combination with Foy and/or Ueda should be withdrawn. The Applicants further provide evidence that one of ordinary skill in the art would not use a compatibilizer as described in Ueda, which lessens delamination tendency, to produce the rough surface described in Bourdelais, that the addition of a compatibilizer to the invention of Bourdelais would render it inoperable or change the principle of the invention's operation, and that Bourdelais teaches away from a combination of polyether containing conductive polymer, extrudable polymer and compatibilizer to achieve both conductivity and roughness in a single layer.

It is believed that the foregoing is a complete response to the Office Action and that the claims are in condition for allowance. Favorable reconsideration and early passage to issue is therefore earnestly solicited.

Respectfully submitted,



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Enclosures: Replacement Figure x
Copies of Formal Drawings

If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.